

Evaluation PUM: Case study report Uganda
Annex B to Final Report



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Evaluation PUM: Case Study Report Uganda

Supporting Vocational Education and Agribusiness in Uganda

Annex B to Final Report

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Table of content

1	General	1
1.1	Introduction.....	1
1.2	Background country and sector.....	2
1.3	Description of the SKY Programme.....	5
1.4	Overview of cases.....	6
1.5	Stakeholder mapping.....	8
1.6	List of interviewed stakeholders.....	9
2	Overall Findings	13
2.1	Effectiveness.....	13
2.2	Sustainability.....	15
2.3	Efficiency.....	17
2.4	Relevance.....	19
2.5	Coherence.....	21
2.6	Additionality.....	22
3	Conclusions	25
4	Detailed Case Study Findings	27
4.1	Client 1: Kyera Agricultural Training College.....	27
4.2	Client 2: Kitagata Farm Institute.....	31
4.3	Client 3: AGDI Dairy Farm.....	35
4.4	Client 4: Nyarubungo Mixed Farm.....	38
4.5	Client 5: Rweshenko Mixed Farm.....	41

1 General

1.1 Introduction

This report presents the results of an ‘embedded’ case study focusing on the agricultural sector in Uganda and the role of vocational education institutes serving that sector. Within this case study, we analyse the potential for PUM to have impact at the level of a sector, based on five separate PUM cases. Two of the cases studied were standalone cases with individual farms, while three cases were part of the Skilling Youth for Employment (SKY) programme to which PUM contributed. The goal of comparing these five cases was to assess whether differences can be detected between PUM activities carried out as part of the new ‘programmatic approach’ (focused on strengthening economic clusters), and the more traditional standalone missions.

A key hypothesis that this case study aims to test is that that PUM’s new ‘programmatic approach’ amplifies PUM’s impact and makes it more sustainable. As illustrated in our Theory of Change (in Chapter 2 of the overall PUM evaluation report), this amplification of PUM’s impact is expected to occur through three main channels: (1) spillover effects, through economic clusters and supply chains, (2) demonstration effects, and (3) cooperation, cost and knowledge sharing. In addition, the programmatic approach is expected to be more efficient through economies of scale

The results from this country case study are used in our overall PUM evaluation report, where they are triangulated and synthesised with the results from other information sources.¹ As such, the results described in this case study report are compared with other evaluation findings that have emerged from other information sources, including a similar case study for Myanmar, our PUM Stakeholder Survey, the existing PRIME survey data, portfolio data analysis, document analysis, and interviews with PUM management and Dutch government representatives.

The main results of the five client case studies are summarised in Table 1 below and suggest that there is no significant difference between programmatic and standalone cases. In fact, there is clear evidence of effectiveness and sustainability of results for four out of five cases, while the fifth case study remain to be completed, pending a client interview. However, as indicated in Chapter 2, there are indications that a programmatic approach yields stronger indirect effects on the sector as a whole, through spillovers and demonstration effects.

¹ “Triangulation” refers to the use of multiple methods or data sources to develop a comprehensive understanding of phenomena (Patton, 1999). Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources.

Table 1 The evaluation team found largely positive evidence in terms of effectiveness, sustainability, and more conflicting evidence in terms of efficiency, additionality and coherence.

PUM client	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF ²
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Date					
Effectiveness	++	++	++	++	N/A
Sustainability	++	++	++	++	N/A
Efficiency	+/-	-	++	+	N/A
Additionality	+	+	+/-	+	N/A
Coherence	+	N/A	+/-	++	+/-

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates somewhat negative impact, “+ -” indicates conflicting evidence of impact, N/A indicates absence of evidence.

1.2 Background country and sector

The Republic of Uganda is an ethnically diverse, dominant-party presidential republic. It is located in East Africa, in the African Great Lakes region, and shares a portion of Lake Victoria with neighbouring Kenya and Tanzania. From 1894, Uganda was a protectorate from the UK, gaining independence in 1962. The country has gone through various political upheavals including a military dictatorship from 1971 to 1979, by which an estimated 80-500 thousand Ugandans died; the period ended after the Tanzania-Uganda war in 1979. Uganda is since 1986 governed by president Yoweri Museveni, with political parties limited in their activities. Official languages are English and Swahili, although others are widely spoken as well—Luganda, Lango, Luo, and others³.

Uganda’s exports have historically been dominated by agriculture. The main export crop is coffee, while other agricultural exports include dried legumes, fish fillets, and corn.⁴ As Figure 1 shows, the share of agriculture in exports declined somewhat from around 50 percent during 2000-2008 to around 30 percent but 2018, but remains high and therefore a relevant sector. The decrease in the share of agriculture was largely the result of corresponding increases in the share of services exports (particularly tourism and IT services)⁵ and the export of stones.

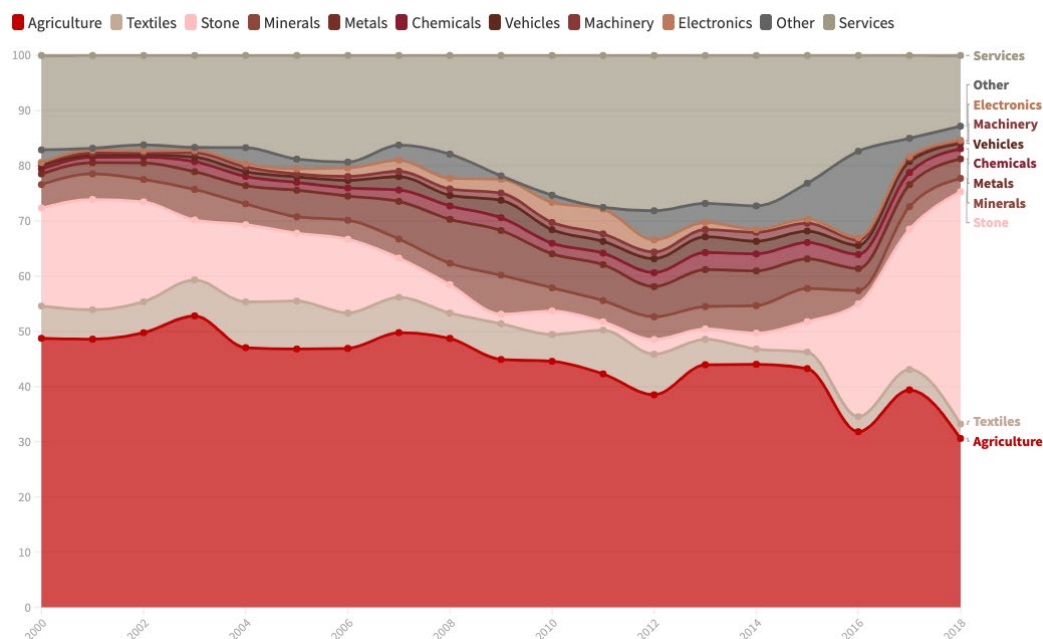
² The results for RMF are not yet determined, pending the interview with the PUM Client which thus far could not be scheduled.

³ <https://en.wikipedia.org/wiki/Uganda>

⁴ <https://oec.world/en/profile/country/uga/>

⁵ <https://atlas.cid.harvard.edu/countries/227/>

Figure 1 The share of agriculture in Ugandan exports has declined, but remains high at around 30%



Source <https://atlas.cid.harvard.edu/countries/227/export-basket>

Despite improvements, poverty in the country remains high and school enrolment remains low. Around 40% of the population is living on less than USD 1.90 per day, which is a decrease from 65% in 2002.⁶ School enrolment is a mere 4 percent for tertiary education,⁷ and around 10 percent for secondary education,⁸ despite increases in recent years.

The agricultural sector has been a key driver of Ugandan employment and an important source for poverty reduction. According to the World Bank, around three quarters of young Ugandans work in farms.⁹ The agricultural sector was thereby a significant driver of the reduction in unemployment and poverty seen through the 2000-2010s: more than 70% of poverty reduction was among households in agriculture.¹⁰

⁶ <https://data.worldbank.org/eur/idm/oclc.org/share/widget?indicators=SI.POV.DDAY&locations=UG>

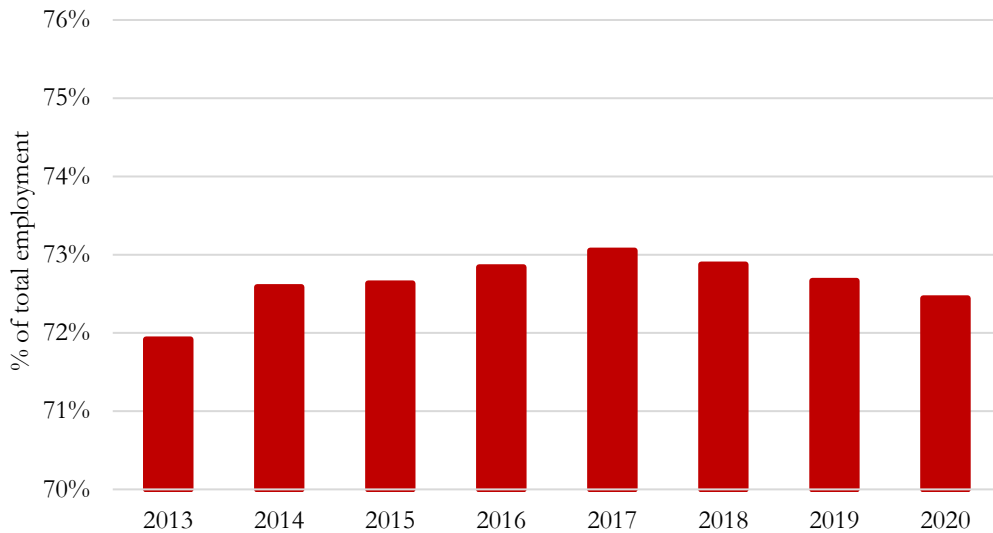
⁷ <https://data.worldbank.org/share/widget?indicators=SE.TER.ENRR&locations=UG>

⁸ <https://data.worldbank.org/share/widget?indicators=SE.SEC.ENRR&locations=UG>

⁹ <http://documents1.worldbank.org/eur/idm/oclc.org/curated/en/693101582561426416/pdf/Uganda-Jobs-Strategy-for-Inclusive-Growth.pdf>

¹⁰ <https://openknowledge.worldbank.org/eur/idm/oclc.org/handle/10986/26075>

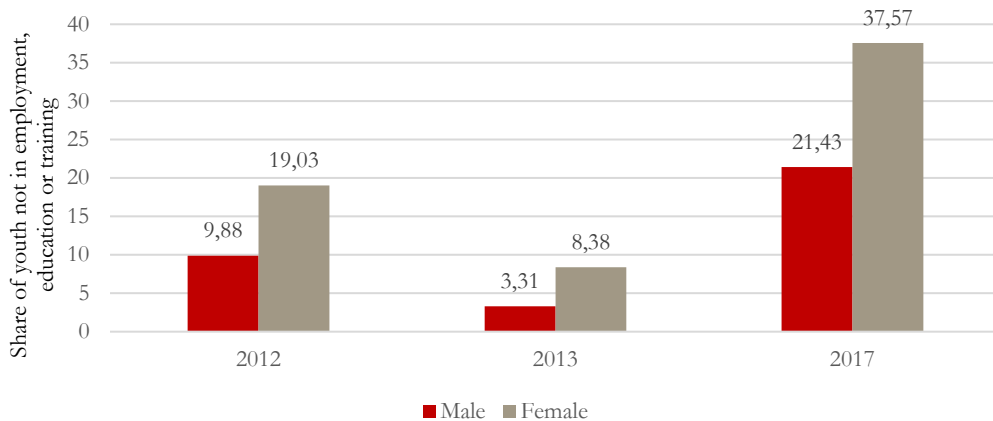
Figure 2 The share of employment in agriculture remains high in Uganda at around 72%



Source: World Bank Development Indicators¹¹

The education system, however, has difficulty preparing the youth for this type of employment. It is characterised by high drop-out rates, stark differences in quality among regions, and lack of direct labour-market relevance. Due to these deficiencies, around 21 percent of men and 38 percent of women between ages 15-24 were neither working nor in school in 2017 (Figure 3).¹²

Figure 3 Youth unemployment in Uganda is high and increased to 30 percent in 2017



Source: <https://www.ilo.org/shinyapps/bulkexplorer28/>

¹¹ https://www.researchgate.net/publication/228313188_Is_Informality_Welfare-Enhancing_Structural_Transformation_Evidence_from_Uganda

¹² See also <http://documents1.worldbank.org/eur/idm/oclc.org/curated/en/693101582561426416/pdf/Uganda-Jobs-Strategy-for-Inclusive-Growth.pdf>

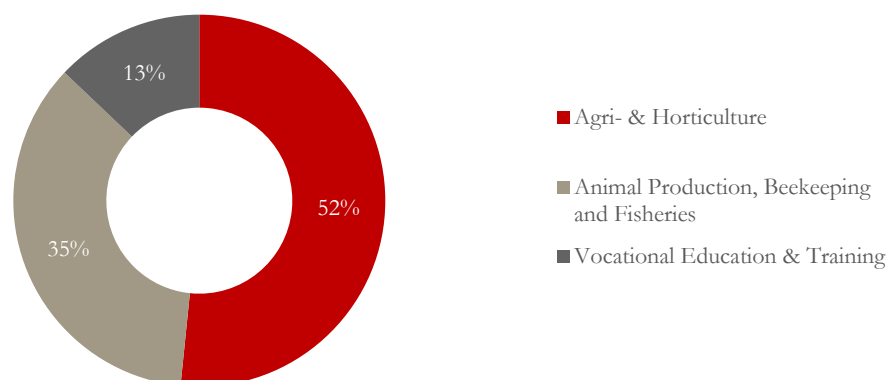
1.3 Description of the SKY Programme

The programme that is the focus of this evaluation is the **Skilling Youth for Employment (SKY) programme**. SKY is a programme aimed to address youth unemployment by training young people in agribusiness. The programme was implemented by AVSI Foundation¹³ with funding from the Embassy of the Netherlands in Uganda. SKY's goal was to enhance sustainable creation of employment opportunities for 6,000 youth in the agribusiness sector in the areas of Lake Kyoga, Elgon, Lake Victoria Crescent, and South-Western Uganda¹⁴.

PUM's role in this AVSI-led programme was to provide support in technical training, working as a subcontractor for SKY. PUM's work with SKY included support to vocational education institutions but also direct support to farmers. Creating partnerships between farmers and educational institutes (for example to establish internships for students) was seen as one way in which the programme would directly engage with the sector as a cluster. As part of its work with SKY in 2019, PUM also supported the professionalisation of an Agribusiness Incubation Hub at Bishop Stuart University (BSU). Linkages between business incubators and PUM-supported SMEs and vocational institutes are another potential cluster effect of PUM's work.

In partnership with the SKY programme, PUM provided support to Ugandan clients in three sectors: (1) Agriculture and Horticulture; (2) Animal production, beekeeping and fisheries (including Dairy); and (3) Vocational Education and Training. As described in the next section, our selection of client cases aimed to reflect the multi-sector character of PUM's work with SKY, by including not only Vocational Institutes but also small farms.

Figure 4 PUM's support to SKY is split between Agri/Horticulture, Animal Production, and Vocational Education.



Source: PUM portfolio of cases between January 2017 and September 2020

¹³ AVSI (Association of Volunteers in International Service Foundation) is a not-for-profit, non-governmental organization, founded in Italy in 1972, active in 33 countries, with a focus on education: <https://www.avsi.org/en/page/who-we-are/80/>

¹⁴ <https://www.avsi.org/en/news/2016/07/07/sky-working-in-uganda-to-create-employment-opportunities-for-6000-yout/1322/>

1.4 Overview of cases

For the purpose of this Uganda case study, the SEO evaluation team selected three programmatic cases (SKY cases) and two comparable standalone PUM cases, in consultation with PUM and MFA staff. First, two SKY cases were selected in the Vocational Education sector and one SKY case in the Animal Production sector. Subsequently, standalone cases were screened to select clients that received support in similar issues. No comparable vocational institutes could be selected among standalone support cases. Therefore, two farms were selected as standalone cases in the Animal Production sector, allowing us to compare the direct support provided to such clients versus the indirect support provided to such clients via vocational institutes. Below is a description of each selected case, and the support they received by PUM.

Geographically, our selection of client cases focussed on the Kampala region and the southwestern area of Mbarara. These were these two regions with most cases supported by PUM during 2017-2020 (see Table 2) and also the two main regions with cases that received programmatic support through SKY:

1. **Kampala:** The capital of Uganda and largest city in the country, with 1.5 million in the city proper and 6.7 million in the metropolitan area.
2. **Mbarara:** The capital of the Mbarara District, corresponding to the Southwest region in Table 1. It has roughly 200 thousand inhabitants and is the commercial and administrative centre of the region.¹⁵

Table 2 Between 2017-2020, most PUM activities in SKY-related sectors in Uganda were in the Kampala and Southwest areas

Region	Standalone	SKY	Total
Centre	8		8
East	2	3	5
Kampala	22	8	30
North	24	2	26
Northwest	6		6
Southeast	15		15
Southwest	33	10	43
West	3	7	10
Total	113	30	143

Source: PUM portfolio of cases between January 2017 and September 2020
Regions denoted are not official administrative Regions. Only cases within the following 3 SKY-relevant sectors are shown: (1) Agriculture and Horticulture; (2) Animal production, beekeeping and fisheries (including Dairy); and (3) Vocational Education and Training.)

Client 1: Kyera Agricultural Training College (KATC)

KATC is a private educational institute at the tertiary level. It was founded in 2008 by the Archdiocese of Mbarara, and thus has a religious (Catholic) origin. Before 2008, it operated as a farm school, originally created in 1988. KATC offers 2-years study programs, certified by the Ministry of Education. KATC hosts approximately 250 students in each cohort, with 39 staff

¹⁵ <https://en.wikipedia.org/wiki/Uganda>

members, including 17 lecturers¹⁶. KATC is led by Christine Aturihaihi as Acting Principal. KATC required PUM support on improving the training programme by making it more practical, finding ways to improve commercialisation, and developing a multi-year plan through which PUM would provide multiple support missions. It received two missions by PUM experts.

Client 2: Kitagata Farm Institute (KFI)

KFI is a government-owned educational institute. It provides training in agriculture to young students (17-22 years). Its course offer includes short courses as well as 1-2-year courses certified by official institutions. KFI hosts approximately 250 students. There are 22 fulltime teacher and 6 part time teachers¹⁷. KFI required PUM support to train its instructors. They received training from a PUM expert on Active Teaching Learning methods, and on kickstarting Public-Private Partnerships. A second visit focused on opportunities for commercialisation of KFI's products and use of Canvas Business Model techniques.

Client 3: AGDI Dairy Farm

AGDI is a privately-owned farm near Lyantonde. Besides producing a variety of products, it also offers training and functions as a “model farm”. These enterprises are early adopters where new techniques are tried and shared with members of the local community, including other farmers, students, and institutions. Recently AGDI Farm was certified and accredited as an Agricultural Training Centre (ATC) training five modules which include: feeding, breeding, farm management, fodder feeds and nutrition, animal health & control and entrepreneurship. AGDI has 15 permanent staff and 40 casual laborers depending on the workload/season¹⁸. AGDI's owners are a couple that inherited the property from a family with an agricultural tradition. The owner an ex-military man and was described by multiple PUM experts as an extremely driven and visionary entrepreneur. Through him, AGDI is in touch with multiple surrounding farms and institutes. AGDI received multiple PUM visits. It received support from a PUM expert in 2016, followed in the 2017-2020 period by missions from two different PUM experts. The advice included animal feeding and health, and general management of a model farm.

Client 4: Nyarubungo Mixed Farm (NMF)

NMF is a small family farm that started in 2004. NMF has around 100 cattle in two separate nearby locations. NMF asked PUM for support on better feeding methods, pasture improvement and better farm management so as to improve on productivity¹⁹. NMF Received support from two different PUM experts in 2017 and 2018. The farm had already received recommendations from a PUM mission in 2011.

Client 5: Rweshenko Mixed Farm (RMF)

The RMF is a small farm of 105 acres and it employs 4 workers. The owner has 44 crossbreed cows and 24 young stock bulls.²⁰ At the time of PUM's visit, the current owner had recently acquired the farm, and planned on making the necessary improvements to make it commercially

¹⁶ PUM expert report

¹⁷ Idem.

¹⁸ Idem.

¹⁹ Idem.

²⁰ Idem.

viable. RMF received support from a PUM expert in 2017 on water management, mechanisation, and knowledge of herd health.

1.5 Stakeholder mapping

In order to obtain a full view of the agriculture/vocational education sector, the evaluation team interviewed a wide variety of stakeholders. Figure 2 below shows a graphical overview of the most relevant stakeholder groups in this cluster. These include PUM's Country Team, PUM experts, Vocational Institutes, Farms, Employers, graduates and entrepreneurs, as well as SKY partners.

A description of each key stakeholder group is below. Error! Reference source not found. below shows the number of stakeholders who were interviewed in each group for the entire country case study.

- PUM's country coordinators, sector coordinators and project officers are the key PUM stakeholders based in the Netherlands who coordinated PUM activities in Uganda. At the time of the interviews (December 2020 / January 2021), both the PUM country coordinator and the PUM project officer had worked on Uganda for nearly one year. The relevant sector coordinators interviewed for the selected client cases included the Vocational Education and Dairy coordinators.
- PUM's Local Representative built and facilitated connections in the country. At the time of the evaluation, there were four local representatives for Uganda: two of them were locals who had connections with PUM and the Netherlands, the other two were not born in Uganda but had lived and worked there for a long time. The different local representatives each worked in different regions and with different topics and groups of clients.
- PUM experts travelled to Uganda to provide PUM clients with support. The evaluation team interviewed most of the relevant experts for the selected case studies.
- The Dutch Embassy in Uganda funded the SKY programme.²¹ The key local contact person from the Embassy was the Senior Policy Officer for Agriculture and Agribusiness, who provided the evaluation team with valuable information and supported the field visit in various other ways.
- AVSI led the SKY programme. AVSI is an Italian NGO working in Uganda.²² The activities are coordinated with AVSI's Chief of Party and Private Sector Development and Gender Advisor.
- Local government bodies were partners in SKY. The Ministry of Education and Ministry of Agriculture were connected via reference from the Dutch Embassy, as partners in the SKY Programme. The Directorate of Industrial Training is also a partner and a certifying institution.
- Graduates from Vocational Institutes are PUM's indirect beneficiaries. These graduates may sometimes become entrepreneurs and start their own small farms; more often, according to the interview results, they go on to work in farms. Students have sometimes taken university studies and are looking to gain more practical skills. They expect this will give them higher

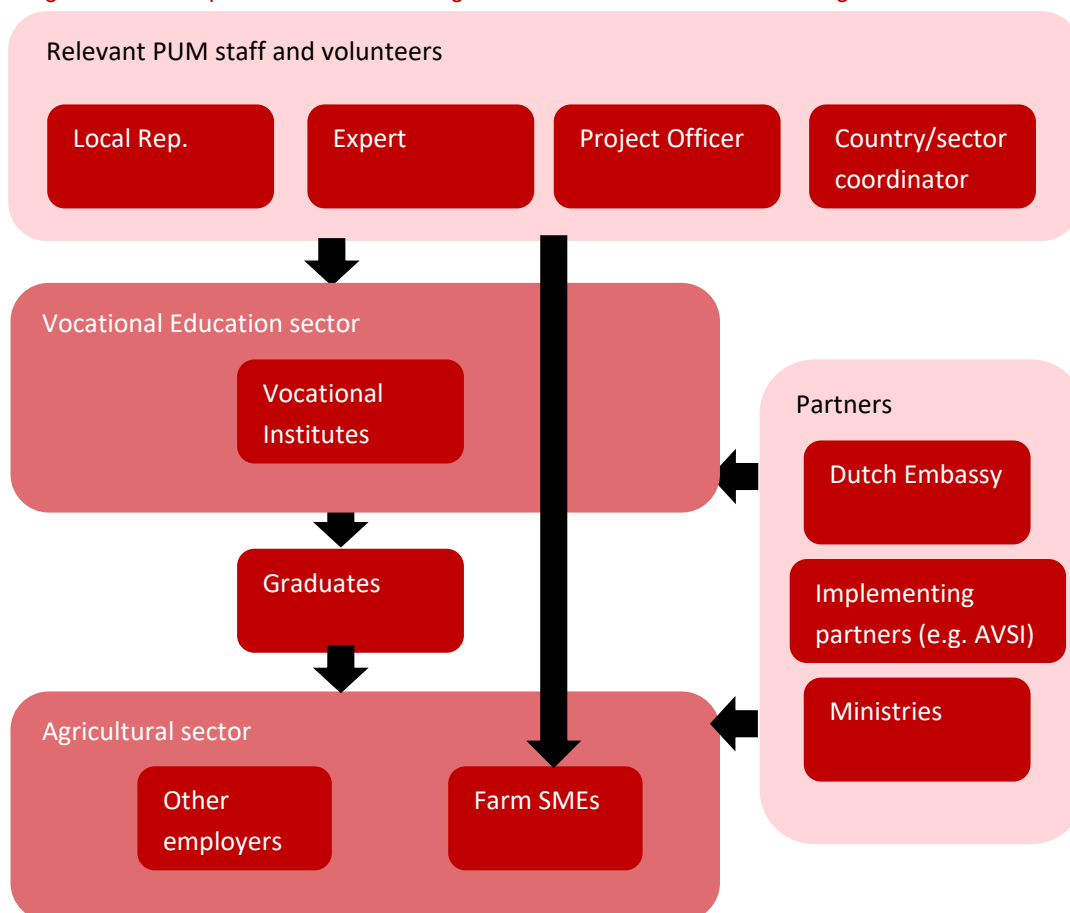
²¹ <https://avsi-usa.org/sky-project/>

²² <https://www.avsi.org/en/>

chances at finding employment. Partnerships between PUM-supported Vocational Institutes and PUM-supported farmers do sometimes occur but are not a structured feature of the partnership.

- Employers create the jobs that are taken by Graduates. Employers may include local farmers, industries, and other graduate entrepreneurs from Vocational Institutes who have started their own business.

Figure 5 Map of stakeholders for Uganda's Vocational Education and Agricultural sectors



1.6 List of interviewed stakeholders

For each client case, the evaluation team interviewed a variety of stakeholders in order to obtain triangulated findings. SEO's local consultant based in Kenya, Phoebe Owuor, travelled from Kenya to Uganda for 10 days (November 28 – December 7) to complete all key interviews with PUM clients and other stakeholders, including the Dutch embassy, programme partners, government stakeholders, teachers/tutors and graduates of the two vocational institutes visited. She also followed up afterwards by phone and email to clarify some issues with various stakeholders. At the same time, SEO's team in the Netherlands carried out virtual interviews with PUM experts and staff. In total, the evaluation team interviewed around 30 stakeholders, whose points of view were triangulated to obtain the consolidated results presented in this report. The

number of interviewed stakeholders are presented by group in Table 3, and each stakeholder is presented in detail in Table 4.

Originally, the plan for field work included two separate trips to Uganda. The first trip would interview the most important stakeholders in each client case and identify other relevant stakeholders to interview. The second trip would carry out the rest of these interviews. Given the uncertainty of travel restrictions caused by the COVID-19 pandemic, the team decided to focus the entire process in one single trip. Furthermore, fieldwork in Uganda coincided with campaigning for national elections, which significantly hampered travelling through the country. Because of these factors, an extensive list of stakeholders (including, e.g. tutors, graduates, or other related organisations) was not reachable for all client cases.

Table 3 Number of interviewed stakeholders by group

Stakeholder group	Number of interviewed persons
PUM experts	6
PUM sector coordinators	2
PUM country coordinators	2
PUM local representatives	1
PUM project officer	1
PUM clients (vocational institute case studies)	4
PUM clients (SME case studies)	2
PUM employers (PUM clients who employed graduates, but were not a case study)	4
Graduates (interns)	3
Implementing partners (AVSI)	2
Dutch Embassy	1
Government stakeholders	2
Total	30

Source: SEO Amsterdam Economics

Table 4 Detailed list of interviewees

N°	Stakeholder	Relevant individual case
1	PUM country coordinator	All
2	PUM former country coordinator	All
3	PUM sector coordinator dairy	All
4	PUM sector coordinator vocational education	All
5	PUM project officer	All
6	PUM expert 1	KATC, KFI
7	PUM expert 2	KATC
8	PUM expert 3	AGDI
9	PUM expert 4	AGDI
10	PUM expert 5	NMF, RMF
11	PUM expert 6	NMF
12	Local representative	All
13	Client Farm Owner	AGDI
14	Client Farm Owner	NMF
15	Client Organisation Representative	All (not main case study)
16	Client Cooperative Association Representative	All (not main case study)
17	Client Vocational Institute Principal	KATC
18	Client Vocational Institute Principal	KFI
19	Tutor 1	KATC
20	Tutor 2	KATC
21	Intern 1	KATC
22	Intern 2	KATC
23	Intern 3	KATC
24	Manager at employer farm	KATC
25	Manager at employer farm	KATC
26	Directorate of Industrial Training Officer	All
27	Ministry of Education officer	All
28	AVSI Chief of Party	All
29	AVSI Officer	All
30	Dutch Embassy Senior Officer	All

Source: SEO Amsterdam Economics

2 Overall Findings

2.1 Effectiveness

2.1.1 Definition

Effectiveness is defined as “the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.”²³

Following the reconstructed Theory of Change for PUM (presented in the overall evaluation report), we measure PUM’s effectiveness in terms of three main levels of results:

- Immediate outcomes: increased **knowledge** in SMEs and BSOs.
- Intermediate outcomes: improved **practices** in SMEs and BSOs.
- Ultimate outcomes: improvements in SME and BSO **performance**, measured as 1) increased turnover; 2) increased profit; 3) improvement in employment, 4) increased sustainability; 5) increased export; 6) increased investment

For vocational education institutes, the reconstructed Theory of Change for PUM establishes additional intermediate outcomes. We take these outcomes into account when evaluating PUM’s effectiveness with regard to vocational institutes. They include:

- Focus on practical skills and curricula better aligned with business needs
- Focus on entrepreneurial skills
- Internships established

For ease of comparison, the conclusions from each client case with regard to effectiveness are summarised in a simple scoring table below. It is worth noting that changes in knowledge and practices were relatively easier to score than changes in performance, as limited information was available on the latter. Changes in knowledge and practices were assessed based on both (a) the perceptions of various stakeholders (with different and sometimes opposing interests), and (b) direct observation by SEO’s local consultant. Changes in performance, on the other hand, were much harder to assess as PUM did not provide consistent monitoring data on this. These changes therefore often had to be assessed mainly based on reported perception among stakeholders, as a result of which the evidence for such changes is considered less strong.

²³ <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

2.1.2 Case study findings

Table 5 PUM was effective in all cases in terms of improving clients' knowledge, practices and performance, while programmatic cases had more potential for spillover effects.

PUM case	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Change in knowledge	++	++	+++	++	+
Change in practices	++	++	++	++	N/A
Change in performance	++	+	+	+	N/A
Potential for indirect effects	++	++	++	0	0

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates somewhat negative impact, “+ -” indicates conflicting evidence of impact, N/A indicates absence of evidence.

There was general agreement among stakeholders that PUM was effective in all cases in improving the knowledge of their clients. In all five cases, the clients manifested effective acquisition of new knowledge. For the two vocational institutes, this knowledge consisted mainly of tools that made teaching more practical, inclusive of the students’ point of view, and entrepreneurial—e.g., the Business Model Canvas, Public-Private Partnerships, and student working groups. For the three farms, knowledge consisted mainly of breeding, feeding and land management, record keeping, and financial management.

Stakeholders also generally agreed that the new knowledge was translated into new business practices. For example, clients adopted a new “Earn as you Learn” concept, which enabled students of vocational institutes to earn an income while they acquired practical agricultural knowledge; farms changed some of their bookkeeping and management practices, as well as methods of breeding and feeding cattle.

With respect to business outcomes, evidence of improvement in performance was present, although less strong. PUM experts could not observe changes in performance (revenues, profit, enrolment, or employment) following their visits. This was mainly because only some experts follow up on clients status, and they do so informally—not as part of PUM’s M&E strategy. However, all PUM clients did report improvements in performance doing field visits by the evaluation team, and attributed them at least partially to PUM.

We observed concrete opportunities for indirect effects in programmatic client cases, but not in our two non-programmatic cases. This potential mostly originated from the fact that PUM clients under the SKY programme were better connected to other stakeholders, increasing the potential for spillovers. Stakeholders of KATC, KFI and AGDI agreed that these clients could spread their newly obtained knowledge and practices to others within the sectors.

Several examples of such spillovers included the following:

- The two vocational institutes both reported increased visibility among potential students following PUM’s visit.
- Their graduates were also identified in nearby farms who had hired them as interns.
- AGDI had gathered other nearby farmers to participate in the support.
- The “Earn as you Learn” concept, which was introduced by PUM experts to KATC and KFI, was later also implemented by other PUM clients under the SKY programme.

Stakeholders reported significant barriers to entrepreneurship that may have reduced PUM’s effectiveness—but that are outside of PUM’s scope. PUM experts referred to so-called “telephone farmers”, who owned relatively large farms and let their workers take care of those farms while they themselves live in Kampala or Mbarara. This makes it difficult for graduates to acquire their own land for farming. Other barriers such as poor infrastructure and lack of funding were often mentioned by PUM clients. Other issues mentioned were political interference, slow uptake of new technologies and a general negative attitude. Finally, although the agricultural sector was seen as a strong source for labour demand, this is expected to change as farmers increase productivity through mechanisation. Overall, these systemic factors might mitigate PUM’s impact on employment in agriculture in the longer term.

There was agreement among different stakeholders that PUM’s missions did not have particular effects for women employment or entrepreneurship. *Please see Relevance section for details.*

On a different note, stakeholders doubted the effectiveness of Remote Coaching as the main or sole form of support. In particular, carrying out remote missions via video or phone calls was mostly seen as unfeasible for the stakeholders who were interviewed for this case study. It is worth noting that none of the client cases received Remote Coaching. However, experts and clients did have experience communicating remotely in general and as a tool for follow-up. They expressed that Remote Coaching would likely be less effective, first because of unstable internet connectivity in rural areas. Second, because clients valued the physical presence of the PUM experts on the field. Added to these considerations, Remote Coaching is naturally more difficult when providing support that is physical in nature (farming). From this, it seems that the implementation of Remote Coaching as a sole form of support may not be optimal—at least for clients located in rural areas and having poor internet connectivity, which was the case for all case studies presented in this report.

2.2 Sustainability

2.2.1 Definition

Sustainability is defined as “the extent to which the net benefits of the intervention continue or are likely to continue.”²⁴ Just as for effectiveness, we focus here on the sustainability

²⁴ <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

at three levels: the sustainability of (a) increases in client knowledge, (b) improvements in client practices, and (c) improvements in client performance.²⁵

2.2.2 Case study findings

Table 5 summarises the evaluation results for the five case studies on sustainability.

Table 6 There is evidence that programmatic cases yield indirect effects that are more sustainable (e.g., spillovers, demonstration effects).

PUM client	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Sustainability of change in knowledge	++	++	++	++	N/A
Sustainability of change in practices	++	++	++	++	N/A
Sustainability of change in performance	+	+	+	+	0
Sustainability of indirect effects	++	++	++	0	0

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates somewhat negative impact, “+ -” indicates conflicting evidence of impact, N/A indicates absence of evidence.

Stakeholders agreed that a strategy of “training the trainer” for vocational institutes created sustainable change for SMEs. PUM clients at vocational institutes indicated that making education more practical improved graduates’ profile and employability, making improvements in employment also more sustainable. One of the PUM clients noted that PUM had contributed to an increase in applications, even from neighbouring countries. Tutors from the institutes noted that they had continued using the teaching methods and tools taught by PUM experts (e.g., Active Teaching Methods and Business Model Canvas), showing sustained change in knowledge and practices for vocational institutes.

For our programmatic farm case (AGDI), changes in practices appeared to be sustainable as well, less so for non-programmatic cases. AGDI farm expected knowledge and improved practices not only to remain in the farm, but also to spread to further SMEs with which it is connected. Indeed, we found that experts had advised other clients to get in touch with AGDI to acquire knowledge about viable products. For non-programmatic farm cases (NMF and RMF) it was less clear that changes in either knowledge, practice or performance could be sustainable. Stakeholders involved with these cases mentioned that not following up with a client hindered impact, while the main challenge was changing their mindset and making them open to new ways of production—which takes significant time.

²⁵ Note that this is a broader definition of sustainability than the one used in the Preparation Report provided by PUM, where sustainability is only defined in terms of knowledge, i.e., as “the preservation of knowledge at the level of clients after PUM’s intervention has ended”

Post-mission follow-up by PUM experts made their impact more sustainable, but such follow-up was not always consistent and hampered by internet connectivity. Stakeholders for all five cases indicated that follow-up via email or WhatsApp had usually happened and had generally been satisfactory. However, some clients noted that they were “left hanging” without knowing how the support would continue, if at all. In some cases, PUM experts continued to be in touch with PUM clients personally, giving them informal support after PUM’s mission. However, there was also agreement among experts that clearer guidelines from PUM regarding the timing, frequency and substance of follow-up contact could be an opportunity to further improve impact. An added challenge to do so was that clients in rural regions (including some of the clients visited as part of this case study) had little or no internet connectivity to allow for remote follow-up, let alone remote coaching.

Indirect effects on non-clients were larger for programmatic cases, as these typically were better connected with other stakeholders through their local networks. For example:

- Graduates from vocational institutes went on to work in nearby farms, thereby spreading knowledge and practices they had learned from PUM (the evaluation team managed to identify and interview some of them).
- Well-connected farms such as KATC and AGDI (part of SKY) functioned as “model farms” and thereby had demonstration effects on other farms around it.

Several suggestions were made to enhance PUM’s sector-wide impact and make it more systemic.

- **First, spillovers to non-clients could be more actively encouraged.** Our interviews suggested that PUM experts were usually ready (and sometimes even eager) to also provide support to other farmers in the same area. However, multiple stakeholders confirmed that this was sometimes constrained by programme requirements. Interviews suggested that there was room for PUM management to improve guidelines on this issue, giving clearer direction to PUM experts with regard to their interactions with potential new clients.
- **Second, the direct and indirect impact of standalone cases could be improved by connecting PUM clients to other stakeholders.** Various stakeholders involved with standalone (non-programmatic) cases noted that PUM could have increased its impact in these cases if it had focussed on connecting a variety of stakeholders (farmers, educational institutes, cooperatives, etc.).

2.3 Efficiency

2.3.1 Definition

The OECD-DAC Network on Development Evaluation defines efficiency as the extent to which an intervention “delivers, or is likely to deliver, results in an economic and timely way.”²⁶ The terms ‘economic delivery’ and ‘timely delivery’ are subsequently defined as follows:

²⁶ <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

- **“Economic delivery of results”** is defined as “the conversion of inputs (funds, expertise, natural resources, time, etc.) into outputs, outcomes and impacts, in the most **cost-effective** way possible, as compared to feasible alternatives in the context.”²⁷
- **“Timely delivery of results”** means “within the intended timeframe, or a timeframe reasonably adjusted to the demands of the evolving context. This may include assessing operational efficiency (how well the intervention was managed).”²⁸

2.3.2 Case study findings

Table 7 PUM is efficient in its missions, including through features of the programmatic approach (group training and long-term engagement).

PUM case	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Efficiency	+/-	-	++	+	N/A

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates somewhat negative impact, “+ -” indicates conflicting evidence of impact, N/A indicates absence of evidence.

Case study findings on efficiency were mixed. In only one case (AGDI) there was clear evidence that the case was conducted efficiently. In all other cases, the evidence was only somewhat clear (NMF), conflicting (KATC) or negative (KFI).

Some PUM clients saw the logistical support provided to the PUM expert as inefficient. For example, some of them mentioned having difficulties in securing a vehicle to pick up the PUM expert and transport him or her around. Different PUM clients also expressed concerns that the accommodations they could provide for the PUM expert was possibly not appropriate. Despite these comments, none of the interviewed PUM experts mentioned these issues as a concern. They did, however, report that other PUM experts had had bad experiences with the accommodation provided. In addition, they reported several unexpected delays encountered during their trips. Taken together, this may point to the need for PUM to establish a process to independently check whether minimum requirements are met, beyond self-reports by PUM clients.

Several stakeholders mentioned that organising missions to support multiple PUM clients at the same time would increase efficiency. There were multiple indications that PUM experts already took extra efforts to support other farmers when they could (besides the PUM client who requested support). Various PUM experts noted that there was room for PUM to coordinate this further, for instance by arranging missions with multiple PUM clients at the same time. In their view, the role of the Local Representative would be key to identify a network of connected clients, and to help organise this kind of joint support missions. However, there were some concerns from PUM staff that, although proactive PUM experts can escalate impact, an efficient operation as part of a programme may require limiting support to official PUM clients.

²⁷ This is consistent with the definition in the ToR, where efficiency is defined as “a measure of how economically PUM converted resources/inputs (funds, expertise, time, etc.) into results”.

²⁸ <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

In general, our findings suggest that the programmatic approach is likely to be more efficient than standalone missions, for two reasons. First, the programmatic approach involves a longer-term view of client support, supporting clients during a longer period of time, thereby reducing the costs of investing in (getting to know) new clients, optimising learning effects and sustainability of impact at the individual client level. Second, PUM’s programmatic approach also entails engagement with a variety of SMEs and BSOs. This reduces the average costs of overall missions by grouping them together.

2.4 Relevance

2.4.1 Definition

Relevance is defined as “the extent to which the intervention objectives and design respond to beneficiaries’, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.”²⁹ In the case of PUM, Relevance is more concretely defined as “contributing to the Ministry’s policy objectives on private sector development, solving gaps in knowledge and skills for SMEs in developing countries and thereby contributing to sustainable economic growth and job creation, especially for the poor, youth (and females).” Relevance is also related to “the countries and sectors where PUM is active as well as the individual companies and volunteers.”³⁰

Following this definition, we distinguish three types of relevance:³¹

- Relevance of PUM support to the sector/country.
- Relevance of PUM support to its clients.
- Relevance to Dutch Private Sector Development (PSD) objectives.

2.4.2 Case study findings

Table 8 The team found evidence that PUM was relevant for the local context and for beneficiaries, but there were counterpoints in terms of content of the intervention for vocational institutes, and relevance for women.

PUM client	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Relevance to clients	+	+	++	+/-	+/-
Relevance to sector/country	++	++	++	+	N/A
Relevance to Dutch policy objectives	<i>Analysed in the overall Final Evaluation Report</i>				

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates

²⁹ <https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

³⁰ Preparation report, page 27.

³¹ The relevance of PUM with respect to the Dutch policy objectives is discussed in the overall final report.

somewhat negative impact, "+ -" indicates conflicting evidence of impact, N/A indicates absence of evidence.

With respect to relevance to sector and country, there was agreement among stakeholders that the general sectors selected for PUM's support was highly relevant for its direct beneficiaries as well as for the country. PUM experts, PUM clients, partners and other stakeholders all confirmed that the supply-side focus on strengthening practical skills in agriculture was highly relevant in Uganda. First, agriculture is a significant source of employment and an important contributor to poverty reduction, as shown in the Introduction. Second, the gap between theoretical education and the skills demanded by the labour market is (seen as) large.³² Many stakeholders believed that practical training like the one provided by vocational institutes will increase the employability of the targeted youth and will encourage entrepreneurship as well. The technical support provided to farms (agricultural SMEs) was equally seen as relevant.

With regards to relevance to its clients, there were diverging views among stakeholders:

- **With regard to the relevance for SMEs,** some (non-programmatic) PUM clients appeared to be relatively wealthy as expressed by experts in interviews and report documents, suggesting that they may not have been in great need of support. PUM experts noted that one PUM client was well-prepared to write a good application and get PUM's support, even if it likely had the means to afford improvements to the farm without PUM's advice.
- **With regard to the relevance for vocational institutes,** PUM clients, PUM experts, and a sector expert had somewhat different views on this issue. Some pointed out that focusing the missions on increasing short-term revenues (for instance through the commercialisation of products) distracted from the actual business model of the institutes (provision of education for a fee). However, this concern was not raised by the PUM clients interviewed. From these interviews, it was clear that the institutes faced budget restrictions and therefore welcomed any additional income generation opportunities. It was agreed, however, that shifting their business model too much could take resources away from education.

There was agreement among various stakeholders that PUM lacked sufficient focus on women entrepreneurship. Neither PUM experts nor PUM clients reported a structured focus on women during PUM's missions. PUM clients sometimes manifested an interest in increasing female enrolment (which was reportedly lower than male enrolment), but without mention to concrete practices. According to other interviewed stakeholders, the Ugandan Government had lowered the grade requirements for women to enter into higher education, which should to some extent facilitate their enrolment. Programme partners at SKY confirmed that women entrepreneurship had indeed not been put into focus, neither by SKY nor by PUM.

³² See Chapter 1.

2.5 Coherence

2.5.1 Definition

The notion of *coherence* can be understood as the compatibility of PUM's interventions with other PSD-interventions. This concept both relates to internal and external coherence. In light of this study:

- **Internal coherence** is used to examine the synergies and interlinkages between PUM's activities and other PSD-activities in the ministry's portfolio.
- **External coherence** looks at the consistency of PUM's interventions with other stakeholders' interventions on PSD in the same sectoral or country context, including complementarity, harmonisation and co-ordination with other stakeholders. In short, it concerns adding value towards private sector development locally while avoiding duplication of efforts.

2.5.2 Case study findings

Table 9 The team found evidence of internal coherence in terms of complementarities, but less so in terms of coordination.

PUM client	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Internal coherence	+	N/A	+/-	++	+/-
External coherence	N/A	N/A	N/A	N/A	N/A

Source: SEO Amsterdam Economics. "+++" indicates very clear positive impact, "++" indicates clear positive impact, "+" indicates somewhat clear positive impact, "0" indicates minimal or no impact, "-" indicates somewhat negative impact, "+ -" indicates conflicting evidence of impact, N/A indicates absence of evidence.

In terms of internal coherence, the content of PUM's missions often seemed to *complement* other support Dutch PSD support. PUM clients who received missions under the programmatic approach mentioned receiving mostly hardware support from the SKY programme (e.g., an irrigation system or a greenhouse). Some clients mentioned that they had received support from SNV (outside of PUM support or the SKY programme), but this also consisted on material support. PUM's support, in contrast, consisted always of expert advice. This shows evidence of internal coherence with other Dutch private sector development programmes in terms of complementarity.

In terms of external coherence, however, *coordination* with other development organisations was suboptimal. Two examples are indicative on this issue:

- **PUM experts mentioned in interviews that, on a number of occasions, they had tried to reach out to another Dutch development organisation but were not encouraged or even prevented from doing so.** In particular, some had wanted to informally exchange information with SNV (for instance about which farmers may be useful to engage with during their visit) while others had wanted to provide support to SNV during a PUM

mission (not one of the cases studied in this report). However, they found misunderstandings within PUM about being able to do so.³³

- **PUM experts and staff were quite often unaware of other development organisations active in the area.** Some clients mentioned receiving support from other development organisations such as KfW from Germany. PUM experts however were not aware which other non-Dutch organisations similar to PUM were present in the content of their support.

In some cases, overlap with other programmes was appropriately avoided. For example, following a fact-finding mission carried out by a PUM expert, there was an internal discussion on the possibility of a PUM-led vocational education programme in Uganda that could have included some of the interviewed clients. It was decided, however, that such a programme could overlap with other development programmes, particularly with AVSI's work through the SKY programme. Given this possible duplication of effort, the initiative did not go through. PUM staff and experts had diverging views on this decision. According to one PUM expert, the initiative could still have been additional to SKY's activities instead of overlapping with them.

2.6 Additionality

2.6.1 Definition

Following the Donor Committee For Enterprise Development, the concept of additionality can be divided into 'input additionality' and 'development additionality'.³⁴

- **Input additionality** is the extent to which “the public input resources are additional to what might anyway be invested or done by the applicant/partner company and other parties.”
- **Development additionality** is the extent to which public resources contribute to changes in development-relevant results that would not have materialised without them.³⁵

³³ A possible improvement would be to incorporate explicit guidelines and expectations for experts on this topic. PUM could also identify a contact person whom the experts can reach out to—at least for significant partners like SNV—even when they are not involved in their particular mission or programme.

³⁴ DCED (2014), “Demonstrating Additionality in Private Sector Development Initiatives”, Donor Committee For Enterprise Development.

³⁵ The OECD-DAC (2016) makes a slightly different distinction, between ‘financial additionality’ and ‘additionality in value’, but this distinction applies more to financial investments. See OECD (2016), *Understanding Key Terms and Modalities for Private Sector Engagement in Development Co-operation*, 2016, p. 4.

2.6.2 Case study findings

Table 10 The team found evidence that PUM was additional to local and international support, but PUM should remain aware of the optimal way to remain additional through the programmatic approach, and to communicate this to stakeholders.

PUM client	1. KATC	2. KFI	3. AGDI	4. NMF	5. RMF
Type of case	Programmatic	Programmatic	Programmatic	Standalone	Standalone
Additionality to local market	+	+	+/-	N/A	N/A
Additionality to international market	+	N/A	+/-	+	N/A
Additionality to other development organisations	+	+	+/-	+	N/A

Source: SEO Amsterdam Economics. “+++” indicates very clear positive impact, “++” indicates clear positive impact, “+” indicates somewhat clear positive impact, “0” indicates minimal or no impact, “-” indicates somewhat negative impact, “+ -” indicates conflicting evidence of impact, N/A indicates absence of evidence.

PUM’s additionality relative to the local market was somewhat clear in two cases, but less clear in other cases. Several PUM experts suspected that there were possible local sources of support for farmers and vocational institutes, although clients did not mention this possibility. One PUM expert identified the National Agricultural Research Organisation (NARO)³⁶ as a source of local support. PUM experts considered that some local universities (for instance in Mbarara) should also be able to provide extension services for vocational institutes. However, multiple stakeholders agreed that local consultants, even if available, would not be able to provide PUM’s quality of service. Available local consultants were seen as having little practical experience in farming and to be younger (i.e., seen as less authoritative) than PUM experts. This convergence of views appears to ease concerns that PUM could be crowding out local sources of support.

With regard to PUM’s additionality to other development organisations, there was general agreement among stakeholders that PUM’s value added lied mostly in its technical expertise and its lower cost. PUM clients valued PUM experts’ hands-on approach, their actual (farming or teaching) experience, and the fact that their age reflected their expertise. This was contrasted with some other development organisations who relied on younger extension officers (including SNV). Various interviewees noted that these factors helped PUM experts quickly gain the trust of PUM clients. At the same time, the fact that PUM provides a high quality of technical advice through volunteers was appreciated highly by all interviewees. According to many interviews, PUM clients could not access this type of support otherwise, and certainly not at PUM’s low cost.

Many interviewed stakeholders expressed the view that PUM would maximise its impact and be most additional and coherent with other support if it stayed out of a leading role and joined other ongoing programmes (such as SKY). This was noted by multiple stakeholders in Uganda (sector expert, PUM Staff and PUM experts). The general view was that PUM’s core expertise consists of specific and inexpensive technical training, and that leading programs requires

³⁶ <https://naro.go.ug>

a different set of organisational qualities. Leading a programme locally would require permanent staff based on the field, teams that are dedicated to draw up a consistent impact strategy, systematic support and follow-up, and improved coordination with other stakeholders.

3 Conclusions

Effectiveness

1. There was general agreement among stakeholders that PUM was effective in all cases in improving the knowledge of their clients. In all five cases, the clients manifested effective acquisition of new knowledge.
2. Stakeholders also generally agreed that the new knowledge was translated into new business practices for both vocational institutes and farms.
3. With respect to business outcomes, evidence of improvement in performance was present, although less strong.
4. While there was no significant difference between programmatic and non-programmatic cases in terms of their direct effects, the programmatic cases appeared to have more potential for indirect effects.
5. There was agreement among different stakeholders that PUM's missions did not have particular effects for women employment or entrepreneurship.
6. Stakeholders doubted the effectiveness of Remote Coaching as the main or sole form of support but saw it positively as a complement tool for follow-up.

Sustainability

7. Stakeholders agreed that a strategy of “training the trainer” with vocational institutes and demonstration farms (client case AGDI) created sustainable change for SMEs.
8. For our programmatic farm case (AGDI), changes in practices appeared to be sustainable, less so for non-programmatic cases.
9. Post-mission follow-up by PUM experts made their impact more sustainable, but such follow-up was not always consistent and hampered by internet connectivity.
10. Working in a programmatic approach seemed to facilitate the spread of knowledge through networks and spillover effects. Indirect effects on non-clients were larger for programmatic cases, as these typically were better connected with other stakeholders through their local networks.

Efficiency

11. Some PUM clients saw the logistical support provided to the PUM expert as inefficient.
12. Several stakeholders mentioned that organising missions to support multiple PUM clients at the same time would increase efficiency.
13. In general, our findings suggest that the programmatic approach is likely to be more efficient. First, because it involves longer-term support; second, because it engages multiple SMEs and BSOs simultaneously.

Relevance

14. With respect to relevance for the local context, there was agreement among stakeholders that the general sectors selected for PUM's support was highly relevant for its direct beneficiaries as well as for the local context more broadly.
15. With respect to the relevance for end-beneficiaries, there were diverging views among stakeholders. With regard to the relevance for SMEs, some (non-programmatic) PUM clients

appeared to be relatively wealthy, suggesting that they may not have been in great need of support. For vocational institutes in particular, there were some different views about whether missions should focus on commercialisation rather than quality of education.

16. There was agreement among various stakeholders that PUM lacked sufficient focus on women entrepreneurship. Neither PUM experts nor PUM clients reported a structured focus on female entrepreneurship.

Coherence

17. In terms of internal coherence, the content of PUM's missions often seemed to *complement* other support Dutch PSD support.
18. In terms of external coherence, however, *coordination* with other development organisations was suboptimal.
19. In some cases, overlap with other programmes (SKY) was appropriately avoided.

Additionality

20. PUM's additionality relative to the local market was somewhat clear in two cases, but less clear in other cases.
21. With regard to PUM's additionality to other development organisations, there was general agreement among stakeholders that PUM's value added lied mostly in its technical expertise and its lower cost.
22. Many interviewed stakeholders expressed the view that PUM would maximise its impact and be most additional and coherent with other support if it stayed out of a leading role and joined other ongoing programmes (such as SKY).

4 Detailed Case Study Findings

4.1 Client 1: Kyera Agricultural Training College

Description of PUM client

Kyera Agricultural Training College (KATC) is a private tertiary institution located in the Mbarara region, training young students in agribusiness. Originally founded as a Farm School in 1988, KATC was established by the Archdiocese of Mbarara in 2008. Until 2011, KATC was affiliated with the Government Agricultural College, after which it became private. It is registered with the National Council for Higher Education (NCHE), a registration body for universities, colleges and tertiary institutions. KATC currently has 39 staff members with 17 lecturers (a majority of graduates with university degrees). It has recently started to formalise its relationships with private companies for internships.

The College offers two-year study programs, leading to a Diploma in Crop Production & Management or in Animal Production & Management. It also offers a national Certificate in Agriculture and Agricultural Engineering and Mechanisation. The courses are registered with the Ministry of Education and the association of private vocation training institutes in Uganda. This means that the content of the curricula is standardised and formalised in a syllabus/course by the Government.

Prior to the PUM support provided to KATC in 2018, Kyera obtain support from other SKY programme partners. In particular, during 2017 and 2018, Nordwin College (Dutch college located in Friesland) supported the improvement of Kyera’s curriculum, in cooperation with EDUKANS and SKY/AVSI. This was done through capacity building in active learning methods to increase the quality and effectiveness of education, the market responsiveness and the school management.

Description PUM support

KATC received its first PUM mission in 2018. During this mission, one PUM expert with experience in education and agriculture advised the institute on the curricula of their training programs with the aim to make them reflect the demands of the labour market. The expert also advised on possible commercialisation strategies for the products of the farm located in the institute, in order to diversify its income—most of it coming from student fees.

Following the first visit, KATC received a second visit in 2018 by another PUM expert. This second expert supported the institute by developing a multi-year plan of cooperation with PUM. The focus of the support remained on improving the practical character of the training, increasing income, and also on establishing a “model farm” for students to farm and sell their harvests. The model farm was used as a tool for learning and examination in a Continuous Assessment Process; it also supported the commercialisation of students’ activities. Simone proposed future support for

2019-2020 in organic crop and animal production, and in food processing. These were first postponed due to volunteer availability, and then due to the COVID-19 pandemic.

Effectiveness

Both the PUM client and the PUM experts agreed that missions were effective in terms of knowledge transfer. One expert supported KATC on increasing graduate enrolment through more appealing flyers and radio campaigns. The introduction of the Business Model Canvas (BMC) helped tutors and students to develop business plans. Tutors and students reported that “the tool is impeccable and builds up easily if fed with right information”.

There was also clear evidence that the knowledge transfer had resulted in changes in its educational practices. This was confirmed by both the client and by KATC graduates, who said they continued to use the CBM to develop basic business plans. The client introduced an “Earn as you Learn’ concept by which students adopted a more entrepreneurial mindset. As one graduate noted: “I left Kyera with my small business plan, some capital, and a fixed mindset to start my chicken business you are seeing here now”. KATC also reported improvements in its general record-keeping and organisational practices. Although the experts also expected the client to adopt improved practices, it was hard for them to assess how much was really implemented. While they kept in touch with the PUM client informally through email and WhatsApp, they had no formal follow-up through PUM.

While hard data was lacking, multiple sources confirmed improvements in performance as well:

- First, the client itself reported improvements in enrolment, production, and income for students.
- Second, both experts noted that KATC had started to produce its own maize, milk and meat, and used it to generate income and feed the students (as recommended by PUM).
- Third, students confirmed that, through the “Earn as you Learn” initiative, they received a small amount of capital from SKY; they used this capital as well as the institute’s land for production and for repaying the loan, while learning from the experience.

Both PUM client and PUM experts pointed to strong connections with other local stakeholders as potential sources of spillover effects. After the visits, the PUM client reported formalising new relations with institutions and farmers. For example, graduates from Makerere University had started visiting KATC as a model farm and for internships in the farm. Although not only as a result of PUM’s support, the reputation of the farm had also been increasing, and was receiving student referrals even from nearby countries (DRC, Rwanda, Tanzania).

In addition, KATC improved its connections to nearby farms also through its graduates. For example, the manager and assistant manager of the nearby Nyamitanga Diocese Farm were both KATC graduates. The current interns at Nyamitanga farm are also students of KATC. These students and graduates have taken with them the skills and knowledge acquired through PUM’s support.

Both the experts and the PUM client noted that PUM had no special focus on women while supporting KATC. Farm activities are not specifically tailored to any particular women issue, nor was the PUM experts' support aimed at them. However, PUM experts advised KATC to establish small business teams consisting of a mix of women and men who could take initiative on particular initiatives developed through Business Canvas. According to tutors, the ratio of women to men was 1:4. KATC's Acting Principal was a woman, but was on maternity leave and could not be interviewed during our field visit.

Sustainability

There are several indications that the provided PUM advice had sustainable effects within KATC. For example, tutors interviewed noted that they had kept on using the Business Canvas in which the first mission had trained them, even with other students who were not part of PUM's training. This is a typical example of why 'training the trainers' is more sustainable than simply providing training to end-beneficiaries.

The programmatic approach taken also has the potential to have wider sustainable and indirect effects on the sector, when compared to a standalone mission approach.

1. **First, a programmatic approach facilitates knowledge transfer beyond one client.** As one PUM expert pointed out, KATC is a case in which PUM provided multiple support missions to connected stakeholders. For example, there is at least one farm that employs KATC graduates and has also received PUM support (Nyamitanga Diocesan Farm). PUM experts expected that these connections would make the knowledge acquired from PUM support to further stakeholders.
2. **Second, PUM support provided to a vocational training institute has the potential to have demonstration effects on other stakeholders within the sector.** For example, PUM advised to establish KATC as a model farm where new techniques can be shown to other institutes (horizontal spill-overs) and farms (vertical spill-overs).

In practice, however, spill-overs and indirect effects may have been limited, potentially due to limited flexibility on the part of PUM and/or SKY. According to the PUM client, this was in part because some programme leaders did not want PUM experts to visit other clients who were not part of the same programme. In this regard, the PUM client reported tensions between PUM experts' readiness to help and the limitations of the programme. While the PUM experts appeared willing and ready to go out of their way to support other neighbouring farmers or institutions, programme requirements appeared to limit this initiative for unconfirmed reasons. At the same time, various PUM staff and experts agreed that being part of a programme does facilitate contact with a greater number of (potential) clients.

The PUM experts interviewed reported downsides with regard to remote coaching but highlighted its value for follow-ups. By the time of the field visit, all form of 'remote follow-up' had thus far been in the form of email communication. The PUM client noted that he was satisfied with this form of communication and saw this as a useful way of keeping in touch with the PUM experts. However, he did point to challenges in dealing with translations of written instructions. One PUM expert, on the other hand, saw the follow-up as insufficient, and pointed to difficulties with the internet connection on site as a hindering factor. Both PUM experts considered the in-

person contact as irreplaceable in terms of creating trust and identifying the most urgent needs. Delays by both parties in responding to emails made it harder to implement advise.

Efficiency

Experts involved with KATC believed a programmatic approach could increase efficiency by grouping client support. In this case, the support missions were thus far focused on KATC, but experts mentioned the possibility of organising joint support missions with various clients together. They noted that they had contact with surrounding farms and appeared eager to escalate their work to more local stakeholders. In their view, it should be possible for the local representative to identify a network of farms and institutes with need of support. This would increase the efficiency of a PUM mission, as support to various farms could be grouped in a single visit. Nevertheless, time restrictions had limited the time that PUM experts had been able to devote to visiting nearby farmers, according to the PUM client.

The client expressed some concern regarding the short duration of a mission. Both PUM experts came for a short time, some of which had to be spent analysing and identifying challenges. Each mission also represents costs for transportation. The weight of these two costs (initial analysis and logistics) could be reduced if missions incorporated more time.

One KATC mission was delayed in 2019 due to a lack of availability of an expert. The mission was therefore postponed. This may be a possible disadvantage of using volunteers for PUM.

Relevance

Both PUM experts and the PUM client agreed on the relevance of strengthening practical skills for youth. Both stakeholders mention that the gap between theoretical education and the skills demanded by the labour market is large in Uganda. PUM visits were strongly focused on practical skills for students—besides practical improvements for the institution. The first PUM expert trained tutors and students on the use of a Business Canvas, which the tutors reported to have kept on using. The PUM expert also advised using Active Learning Methods, which emphasise the student’s participation in the learning process.

PUM experts and client reported other significant barriers to entrepreneurship. PUM experts identified the figure of “telephone farmers”— not only in the KATC case. These are owners of relatively large farms, who are rarely in the farm, and let their workers take care of it while they live in Kampala or Mbarara. According to experts, most surrounding farms are large farms owned by such farmers. This makes it difficult for graduates to acquire an own piece of land for farming. The PUM client mentioned other barriers such as poor infrastructure and lack of funding.

PUM experts and PUM client had somewhat divergent views on the most pressing needs. Even though the support was provided without friction, experts reported divergent views on most pressing needs. One pointed out that the focus on making short-term increases in income distracted from the actual need, which was improvement on the educational system and its connection to the industry. Another expert pointed out that income could be improved by increasing enrolment alone, without losing focus through commercial production.

Additionality and Coherence

PUM experts believed that PUM's support was additional to both the local and international market. Both experts reported that it would not have been financially feasible for KATC to acquire paid support, either local or international. The fact that PUM was able to offer support at relatively low cost (owing to its volunteer nature) meant that the client was able to access support that it would otherwise not have been able to access for financial reasons.

The PUM client also reported receiving support through SNV and EDUKANS, and by KfW Germany. The support from other organisations focused on financial support and technical assistance, but the client reported that it did not overlap with the content of PUM support. The client received an irrigation equipment from SKY, which complemented PUM's advice.

Both the PUM client and the PUM experts saw the main value added of PUM in its technical expertise and hands-on approach. The PUM client noted that other organisations were more focused on providing support in funding and infrastructure. Through the general SKY initiative, the PUM client received support to build a small greenhouse and an irrigation system. The PUM client made reports of the effects of this hands-on approach in the change of mindset in its students after the PUM experts' visits—from a self-perception as potential employees to one as potential entrepreneurs and employers.

KATC, KFI and AGDI were part of a potential PUM programme proposal; the possibility that it would overlap with SKY activities stalled the initiative. The opportunity for a PUM-led programme was identified through a fact-finding mission carried out by a PUM expert, based on the experiences of other experts to KATC. The programme would focus on improving the curricula of the institutes by making them more practically focused, and by connecting them with local farms. After discussions inside the country team and with the relevant PUM experts, the initiative did not go through. PUM staff and experts had diverging views on this decision. According to one expert, the initiative could have been additional to SKY's activities instead of overlapped with them. According to some of PUM staff, such an initiative would present other challenges for PUM, regardless of additionality.

4.2 Client 2: Kitagata Farm Institute

Description PUM client

Kitagata Farm Institute (KFI) trains young people for agricultural employment in the Sheema District in Uganda. The institute also provides non-formal specialised short courses in agriculture. The institute is government-owned and employs 22 fulltime teacher and 6 part-time teachers. The institute functions as a boarding training institute.

The institute has around 250 students, who graduate with formal certificates in agriculture after studying courses for a duration of 1-2 years. It functions as a boarding school where students can learn while producing fruit, crops, vegetables, mushroom, cows, pigs, etc. KFI received PUM support in 2017 and 2018 in partnership with the SKY programme.

Description PUM support

The first PUM visit to KFI took place in 2017. KFI solicited PUM's support to train the staff in new teaching methods. The PUM expert introduced the Active Teaching and Learning methodology to KFI. This was expected to improve the institute's curricula by making it more practically oriented, and by incentivizing the students to come up with their own projects to implement through the KFI. The PUM expert also introduced the staff and students to Public-Private Partnerships, which they could use to demonstrate their ideas to a broader public and possibly engage with them. Further advice from PUM was to engage with industry experts, invest in solar energy and an internet connection, and various management improvements.

In the second visit (2018), the same PUM expert followed up on the implementation of previous recommendations and advised the institute on commercialisation of its products to increase income. The PUM expert introduced the staff to Business Model Canvas to work out new business ideas. This was done through workshops where staff and students proposed and discussed various business ideas.

Effectiveness

Multiple sources confirmed that PUM's support was effective in terms of acquisition of knowledge. According to the PUM expert's reports, tutors and students successfully acquired new knowledge about Business Model Canvas (BMC) and Public Private Partnerships. This was confirmed during interviews with the client.

There was also clear evidence that the PUM client had made changes in educational practices following PUM's advice. During the field visit, it was confirmed by multiple interviewees that the new skills and tools (BMC in particular) had indeed been used to organise small groups of students who would work particular products in different plots of land. This practical work was also factored into their final grades.

According to the client, PUM's support improved the institute's performance as well—although no further concrete figures could confirm it. Beyond making the curricula more practical and business-minded, the PUM support generated business ideas to increase the institute's income. According to the PUM client, this contributed to increase the institute's income from its production and to change the mindset of students, who began thinking in stronger entrepreneurial terms. Due to increased farming activities after PUM's missions, the institute is currently (at the time of the evaluation) hiring up to 25 casual labourers depending on the seasonal workload.

While there was some attention to the role of women during the PUM missions, this was the PUM expert's own initiative, rather than PUM policy. The PUM expert observed that agricultural employment prospects for women in Uganda were indeed different than those for men. For example, women's possibilities to work in bigger farms were more limited. The PUM expert encouraged teachers and students to organise mixed working groups, consisting of both men and women, and reported that the staff received this positively. The PUM client mentioned that he intended to bring more female students on board but did not make references to particular measures. Other interviewed stakeholders from the Directorate of Industrial Training informed

the team that female enrolment had some attention by the government, who reduced the minimum scores required to enter higher education for women.

One factor that limited the impact on practices and performance was a lack of financial resources to implement recommendations. The PUM client mentioned that gaining new knowledge and skills was not sufficient, as the institution also required funds to purchase equipment in order to be able to implement some of PUM's recommendations. He explicitly noted that some recommendations required financial investments that could not be made due to limited funds. For example, PUM also advised the client to improve its electrical and internet connection by using solar power, but this required investments that the client could reportedly not make.

Sustainability

At the time of our field visit, the changes in knowledge and practices appeared sustainable. The tutors and students continued to apply the knowledge and skills taught by PUM, indicating that the impact of the PUM advice was long-lasting.

However, the sustainability of PUM's impact was constrained by a lack of internet connectivity and lack of structured follow-up. Both the expert and the client mentioned that follow-ups were important to facilitate the implementation of recommendations in the longer term. However, both also noted that doing this through remote methods was problematic as local internet connectivity was poor and power outages were frequent (although the expert and the client did have follow-up interactions via email). More generally speaking, the PUM expert mentioned that remote coaching and remote follow-up is more feasible with bigger farms or institutes, while for clients like KFI this is "wishful thinking". Another point raised by the client was that, although he had followed up informally with the expert, this was not structured or planned, making communications slow.

Both the expert and the client agreed that training teachers is a good method to achieve more sustainable impact in the long term. The client expected that this would increase the quality of the education, improve graduates' employability and therefore increase the visibility of the institute, which in turn could attract additional students who could benefit from the same trained teachers. If only students had been trained, the impact would have been limited to one round of students. The PUM expert agreed on this point and emphasised that providing support and training for those who work in education at all levels, from university to primary school, would improve long-term impact.

There was also agreement that PUM's support to KFI could have potential spillovers to other vocational training institutes. The PUM expert believed that the principal could take this knowledge to at least one other institute where he acts as principal as well. The principal mentioned that he was in fact planning to introduce some of the tools taught by PUM at the other institute as well. This concerned in particular the "earn as you learn" concept as well as the Business Model Canvas.

Efficiency

The PUM client mentioned PUM could improve the conclusion of the mission after the PUM expert leaves. He reported that PUM could leave a more structured plan for support and inform the country coordinator and local representative about what needs to be followed-up. The PUM expert, however, did report leaving concrete recommendations after his missions. This could imply that there are inefficiencies in the communication between client, country team, and expert.

The PUM client mentioned logistical support to the PUM expert was a challenge. He mentioned that securing a vehicle to pick up the PUM expert and transport him around could sometimes be difficult and demand extra time. The PUM client also expressed concern that the accommodations for the PUM expert may not be appropriate. However, the PUM expert did not mention these as issues during the interview.

Relevance

PUM expert and PUM client agreed that training on practical skills in agriculture is relevant. Agriculture is a significant source of employment in Uganda and in the South West region where KFI is located in particular. Both stakeholders echoed this observation and considered PUM support to be relevant for the institute, students, and for the local context.

There were divergent views on the relevance of support on commercialisation for vocational institutes. According to the PUM expert, institutes like KFI should not lose focus of their business model: acquisition of students for a fee and improvement of educational quality. The goal of his second mission was determined to be income generation through the commercialisation of the institute's production, which in the PUM expert's view should be secondary. A potential tension between two different business models was also raised by a Sector PUM expert. However, this concern was not raised by the PUM client, who reported both increased income and improvement in the curricula.

Coherence

KFI had not received support from other Dutch organisations. The PUM expert identified EDUKANS and SNV as having projects in the area, but not with KFI.

Additionality

The PUM expert believed that it should be possible for the PUM client to improve teaching quality through local universities. According to the PUM expert, teachers at the institute are educated in the local universities and could acquire there the knowledge they need to improve the quality of education at vocational institutes. He reported that PUM could have more impact by engaging with universities directly and improving teachers' skills before they join vocational institutes. However, this was not mentioned as a possibility by the PUM client, which seems to indicate that PUM is additional to at least the current educational system as it is currently equipped.

There is agreement that PUM's volunteer work provides clients with a service they could not otherwise access. According to his report, if PUM were not based on volunteer work the

kind of support provided would likely not be possible for clients in Uganda. The PUM client indeed mentioned not being able to afford services such as PUM's support.

4.3 Client 3: AGDI Dairy Farm

Description PUM client

The AGDI Dairy Farm is a privately-owned agribusiness located in the Kirushura district, 10km from Lyantonde. The owners of the farm come from traditional cattle farming families, but decided to give the farm a new commercial direction. One of the owners is a former military worker and has been described by multiple PUM experts as an extremely driven and visionary entrepreneur.

Besides producing milk, AGDI also provides education in a training centre. Students receive both theoretical training in the centre and practical training in the farm—which was set up with support from SKY and technical input from PUM experts. AGDI works as a “model farm”, i.e. farms where new techniques are tried and shared with members of the local community like other farmers, students, and institutions.

Together with KATC and KFI, AGDI was part of a potential PUM-led programme proposal that was ultimately not started. *For more on this programme proposal, see Case study 1 for KATC.*

Description PUM support

AGDI received three PUM support missions in 2016, 2017, and 2018. It first received support in 2016 to improve feeding and silage; to improve general herd management; and to collect data to check growth, fertility and milk production. In 2017, AGDI received additional PUM support another PUM expert, with regard to further improvements regarding herd management, feeding and silage. The second expert also trained some of the tutors in AGDI and provided them with teaching materials. In 2018, a third PUM expert followed up with a similar support mission.

Effectiveness

The PUM client and experts agreed that there was effective transfer of knowledge. All stakeholders interviewed reported improved knowledge on feeding, breeding, silage, and general farm management.

There was also clear evidence that PUM had contributed to new practices. For example, a PUM expert had developed a system by which workers could quickly determine the appropriate amount of food for cattle, depending on a variety of factors. The PUM client also reported improved record keeping in connection with efforts by PUM experts in collecting data from production. Following PUM's suggestion, the PUM client employed a qualified manager with a university degree to supervise the farm. Furthermore, the expert believed that PUM helped AGDI to achieve a certification as training centre by the Directorate of Institutional Training. Both the PUM client and AVSI representatives agreed that this would be a great improvement for AGDI.

AVSI staff even expected that “the AGDI training centre will become a centre of agricultural excellence in Uganda”.

The new services offered by AGDI appeared to increase its income and employment. After being certified as a training centre through PUM’s support, AGDI started to offer extension services in various topics to nearby farmers. This created a new income stream for the farm—and new services for other farmers. AGDI also hired more professional staff to carry out these activities.

There was no mention of support aimed specifically at women from the PUM client or PUM experts. PUM experts reported advising the PUM client to include both women and men in all activities. They also recognise that any advice related to woman came from the PUM experts’ own initiative, and not from a structured approach from PUM. The AVSI team also recognised they had not given much thought to gender, nor include it as a component of the programme design. Most of the interviewees agreed that the issue of gender should be deliberately included, perhaps with some form of affirmative action. The interviewees agreed that the main challenge leaving women out of the formal agricultural sector is the amount of hard labour involved in the farm.

Sustainability

There were several indications that the PUM support to AGDI had positive spillovers on other farms, thus resulting in a more sustainable and systemic impact on the sector. Shorter-term effects may come from individual missions to support farmers, but the PUM client expected that the sharing of knowledge with other farmers and the official establishment of its training centre would make these effects long-lasting. The evaluation team found some evidence of this in a different client case (see case study 5), which was advised by a different PUM expert to visit AGDI to acquire knowledge of possible crops to produce. This was a good example of how AGDI’s role as a reference point and “model farm” could enable spillover effects to other farms.

Long-term effects on employment may be hard to achieve and would follow the path of mechanisation. The PUM client reported an increase in the number of employees—and a new manager for the farm was also hired. But PUM experts see job creation as a difficult goal in this context. The way toward higher production will necessitate an increasing adoption of mechanisation, which will demand less labour. Nonetheless, mechanisation may more likely be expected from larger farms, while SMEs such as PUM’s clients may remain relatively more labour-intensive.

PUM experts pointed to the threat of an overuse of antibiotics. According to one PUM expert, the use of antibiotics was widespread in the region. Farmers had been using antibiotics as a cure for diseases sooner than they were making efforts to prevent disease through proper feeding and care. This could lead to bacterial resistance and thereby threaten sustainability.

Efficiency

AGDI and PUM experts arranged multiple visits to nearby farmers, which was efficient in that it increased the reach of the support. PUM experts were willing to visit multiple farmers in

the nearby region, and to provide support to those who visited AGDI. The PUM client, in turn, was proactive in connecting with farmers and institutes around him. He said to be aware of the benefits that this creates for the farm. Increasing the number of farmers supported made the mission more efficient by increasing the number of SMEs supported during a single mission. However, this responded to the particular personalities of the PUM experts and PUM client, and not to a structured strategy by PUM. No other clear efficiencies or inefficiencies were observed.

Relevance

PUM support appeared highly relevant for the client beneficiary. AGDI received specific technical advice on its dairy practices, but also moved forward in its attempt to formalize its training centre, and helped the farm gain more visibility as the PUM experts visited other alongside AGDI. All of these elements seem relevant for the beneficiary and the surrounding community. The content of the support also aligned with the original support request presented by AGDI to PUM.

Both the client and the experts agreed that the PUM support was highly relevant for the sector and the country. In their views, the entire sector needed training such as that provided by PUM, but also better infrastructure. The PUM client reported that PUM's role in the sector is significant, as it provides an example of how agricultural training should be made more practical. Nevertheless, he mentioned that several constraints were also pressing, but outside of PUM's scope to address political interference, slow uptake of new techniques by farmers, and a general negative attitude among entrepreneurs regarding innovation.

Both experts and client also pointed to possible additional support from PUM that would be relevant for the sector. The PUM experts pointed out that, as incomes in Uganda grow, demand for dairy will grow as well, at which point farmers will need support with further mechanisation in order to meet the challenge of increasing supply. In this regard, they pointed to an opportunity for Dutch companies to sell second-hand equipment. AGDI agreed that there are opportunities for PUM to create further synergies with Dutch companies, not only to sell machinery to clients, but also to develop internships and exchange programs for Ugandan workers and entrepreneurs in the Netherlands.

Additionality and Coherence

PUM's additionality in this case was not proven. The following alternative support sources were identified by the evaluation team, and it was not clear to what extent PUM was fully complementary to them.

AGDI has also been supported by SNV in the context of the TIDE programme (The Inclusive Dairy Enterprise programme)³⁷. The goal of this programme has been to train dairy farmers and increase milk productivity. The programme has also worked to establish "practical dairy training farms"³⁸, one of which is AGDI. PUM's work appears complementary to SNV-

³⁷ PUM has also provided support to other SME's in partnership with SNV-TIDE, but the support to AGDI in particular was in partnership with AVSI-SKY instead.

³⁸ <https://snv.org/update/improving-dairy-productivity-through-establishment-practical-dairy-training-farms>, <https://snv.org/update/agdi-dairy-farm-launches-modern-milking-parlour-support-tide-project>

TIDE's support to AGDI. The expert's mission report documents, for instance, mentioned that AGDI had built two classrooms with SNV's help, where classes could take place. However, other Dutch development organisations are also part of SNV-TIDE, including the Netherlands-funded Agritererra. The evaluation team could not obtain further details as to how PUM's work complemented or overlapped with Agritererra in the context of the SKY and TIDE programmes in Uganda.

The PUM expert noted that another local stakeholder, the National Agricultural Research Organisation (NARO) could provide support on AGDI's curricula. However, the client did not confirm obtaining support from them. If PUM engages with it, this local stakeholder could present both possible complementarities and possible overlaps.

In general, stakeholders saw PUM's value added mostly in the experts' hands-on approach and their senior experience with actual farming. Being of a more mature age also proved an advantage, as multiple stakeholders reported a strong local culture of respect for older counterparts. PUM experts noted that they capitalised on this when building trust with PUM clients—compared to younger Extension Officers from other organisations like SNV. Their capacity to show that they had experience as farmers themselves—compared to some other local consultants—also helped PUM experts to build trust with PUM clients as well.

4.4 Client 4: Nyarubungo Mixed Farm

Description PUM client

Nyarubungo Mixed Farm (NMF) is a privately-owned cattle farm in the Mbarara region in Uganda. The owners have close to 100 cows on two separate locations. The farm produces mainly dairy. The couple established the farm in 2004 and subsequently made various improvements to it formally registering it in 2016. They upgraded the quality of the cattle with pure-breed Frisian bulls, started to use silage to produce hay for their feeding, and began drawing up plans to increase the farm's production. At the time of our field visit in December 2020, the farm had 4 permanent staff and 15 temporary staff depending on season and activity. The owners themselves lived in the nearby city of Mbarara.

Description PUM support

NMF solicited PUM's support to improve feeding methods, pasture quality, and management of the farm. They received a first PUM support mission in 2017, and a second visit in 2019. The main constraints identified by the PUM experts were the quality of the fodder, an irregular supply of concentrates, and heat waves in the summer. PUM experts advised the farm owners to grow maize (corn) to improve feeding for the cows, to implement a more consistent use of concentrates, to start using fertilisers for the pastures, and to shift to partial zero-grazing by building a shed.

Effectiveness

In terms of knowledge transfer, the PUM missions appear to have been effective. There was clear evidence from multiple sources that the client acquired knowledge on improved management systems, commercialisation, and on technical knowledge regarding the breeding of heifers.

There was also clear evidence of new practices implemented with PUM recommendations. For example, both the client and the experts confirmed that the farm had started selling higher-quality heifers, following the recommendation of PUM experts. The heifers were improved breeds through use of selected quality artificial insemination. The insemination regime was also better organised, owing to a new farm manager. Moreover, the client introduced a new insecticide spraying technique (cattle spray race) that reduced the spray time from 3 hours to 30 minutes. This increased effectiveness and led to a reduced manifestation of East Coast Fever, a tickborne disease prevalent in the region. PUM funded 50% of the spray race construction.

The impact of the PUM missions on client performance appears to have been good, although hard data on business outcomes were lacking. The client indicated that following PUM's advice, the quantity and quality of milk production increased, generating higher sales revenues—but without mentioning how much higher. The improved heifer breeds were also reportedly sold for better prices, further increasing revenues.

Besides the direct impact on farm performance, there are indications that the PUM missions may have also had an indirect impact on suppliers and employees. While hard evidence on these effects was not available, the PUM client considered it likely that higher milk production at the farm also increased their retailers' business and therefore employment at their retailers.

The client was already collecting data before PUM's mission, which helped the expert give more precise support. For example, the PUM experts observed that the farm had already started collecting data on milk production. According to the PUM experts, this made PUM's missions more effective.

The PUM experts did not observe particular effects for women. The PUM experts observed that the farm was co-owned by a woman, and that indeed she took part in its management. Beyond that, there were no women working the farm, and no particular effects for women were observed.

Sustainability

There was some evidence that changes in knowledge and practices and were sustainable. At the time of the field visit by SEO's local consultant (a year after the last PUM mission) the changes in practices mentioned above appeared to be persistent. The client expected that the improved milk production would be sustainable as well, but no further evidence could confirm this.

Looking at what would increase sustainability further, different stakeholders agreed that sustainable impact requires a structural approach engaging various stakeholders. In the PUM client's view, PUM could increase the sustainability of impact by working with cooperative

groups on farmers cohesion and collective bargaining, on school programmes, and milk storage centres. The PUM experts' view coincided with this; they mentioned that PUM could set up demonstration farms in the region. These kinds of initiatives are already part of PUM's activities under the programmatic approach, and in connection with the vocational education sector. The PUM experts who were interviewed for NMF were no longer active as PUM volunteers and were likely not aware of more recent changes. Nevertheless, their diagnosis signals that PUM's shift to a programmatic approach, and a deeper engagement with vocational institutes, is in line with sustainable impact.

Efficiency

Stakeholders remarked that the amount of time spent on the mission was efficient. PUM experts mentioned that, when support is focused on improving clients' technical knowledge on farming, short and concise support like that provided to NMF is efficient (1-2 weeks).

Relevance

PUM expert considered better technical knowledge is key for successful results in the dairy sector. The content of PUM's advice was thoroughly aligned with this need. The PUM experts provided specific technical knowledge on dairy farming, guiding the PUM client to build a plan to improve several practices.

The PUM client was highly educated and relatively wealthy, raising questions of relevance. PUM experts noted that the PUM client was well-prepared to write a good application for PUM's support, even if they likely had the means to afford improvements to the farm without PUM's advice. The PUM experts had also supported other family farms in the region and expressed the same concerns: relatively rich families who do not live in the farms and yet acquire support from PUM. For them, the challenges to improve production come mainly from shortfalls in management knowledge. It is therefore somewhat questionable whether PUM had selected the most relevant clients, i.e., the clients for which PUM could achieve the highest potential impact.

Coherence

Overlap with other programmes was limited but coordination could be improved, as PUM experts were not aware that the PUM client had also received support from SNV. The support provided by SNV (with setting up a water pond for cows) complemented the technical knowledge provided by PUM, making the activities of the two organisations relatively coherent at the level of Dutch support. However, what was somewhat concerning was that PUM experts did not know that the PUM client had received SNV support, although they were aware that SNV was present locally.

Additionality

One PUM expert tried to reach out to SNV to exchange information about the sector and clients but reported that they were not interested in this exchange. According to the expert's reports, they were focusing on infrastructure support, particularly on water management and irrigation—which makes them complementary to PUM support. The PUM expert observed that were likely not the most urgent needs, at least for NMF. This shows that experts are motivated to

coordinate with other organisations working on the field, but that this is difficult to achieve if there is no structured cooperation from PUM in putting them in touch.

PUM experts view PUM's value in their ability to translate technical knowledge into practice. Contrary to local consultants, PUM experts have life-long experience putting knowledge into practice themselves. PUM experts consider that PUM clients see this and that they value it greatly. Furthermore, PUM experts believe there is a certain authority in the Dutch dairy sector, which is well known to farmers in Uganda. PUM experts observed that, in occasions, it is not knowledge that farmers are lacking, but a certain confidence needed to implement new practices. PUM experts can encourage clients to take these steps, while this may be harder for local consultants.

4.5 Client 5: Rweshenko Mixed Farm³⁹

Description PUM client

The Rweshenko Mixed Farm case consisted of support to two farms who applied for PUM support jointly. Both farms are located in the Mbarara region, in South West Uganda. The first farm was 105 acres and employed four workers. There were 44 crossbreed cows and 24 young stock bulls. The owner of the first farm bought the land for this farm in 2011 when he was working for the government. One year before PUM's mission he left his government job and became a full-time farmer. At the time of the field visit in December 2020, the second farm had 80 acres of land, with around 30 cows and 80 goats.

Description PUM support

The clients received one PUM support mission in 2017. Both clients had requested support with tackling water scarcity and improving productivity (or limiting losses) during the dry season. The expert also advised the farm's owner to visit the AGDI model farm (see Case study 3) to get an idea of which other crops would be possible to grow in his land.

Effectiveness

In terms of knowledge transfer, the PUM mission appears to have been effective (although this remains to be confirmed by the clients). According to the expert's report and available PUM documentation, the expert advised both clients on how to improve water dam and storage, to use manure and fertiliser to improve pasture feeding, to begin storing part of the fodder for the dry season, to add concentrate to feeding, and finally on breeding for optimal production. He also advised to start recording data on production.

³⁹ The evaluation team could only interview the relevant expert for this case study, and not the clients on the field. The results are therefore not triangulated findings, but the product of interviews with the experts and revision of documents.

Evidence on changes in practices or performance was minimal. According to the debriefing data, the expert saw the goals as only partially achieved because the clients (a) were open to incorporate his advice, but (b) lacked the necessary financial resources to make the recommended investments. The expert’s advice indeed included recommendations to incorporate new equipment and to invest in fertiliser and concentrated food. Part of the advice, however, was in fact independent of any investments (recommendations on water and pasture management, breeding cycles, storage of food, and record-keeping). This being said, no hard evidence could be obtained that this advice was implemented. With regard to data on production, no such data appear to have been shared with PUM.

Gender impact appeared to be lacking as well. The expert believed that all PUM experts, as a general attitude, do pay attention to how they can support women during their mission. In the particular case of RMF, it was clear for the expert that the client was not willing to involve women in farm activities. As reported by the expert, the client believed “women should be behind the door”. Given this, the expert thought no particular actions were possible during the mission.

Sustainability

While hard evidence was lacking, several factors suggests that the sustainability of PUM’s impact in this case was limited:

- The expert made a 5-year action plan with the clients but could not keep contact to follow up. The expert had planned to follow up informally via email, but communication was difficult, particularly because of the language barrier. The expert could therefore not confirm that any changes in practices/performance had taken place.
- Despite numerous efforts, neither the evaluation team nor the PUM local representative were able to reach the clients in the field, suggesting that the client had different priorities.⁴⁰
- According to the debriefing data, the clients had indicated that they wanted to receive further PUM support in the future, suggesting that more support was needed.

The expert saw the main challenge to long-lasting result in the mindset of clients. He reported that certain business practices, although not the most efficient, are passed from generations of cattle keepers or farmers. The clients produced plenty of fodder during the wet season, allowing cows to recover, but because they didn’t store any of this feeding for the dry season, the health of the cows then shifted back dramatically again. Convincing them that they should feed the cows less during the wet season and store of the fodder presented a challenge. In the expert view, this is the reason why “model farms” like AGDI are essential for long-term impact. They allow farmers to see for themselves how different forms of management can produce better results.

The expert believed that a “training the trainer” strategy (related to the programmatic approach) is a way for PUM to achieve more sustainable impact in the long run. The same expert had also provided support to AGDI farm and considered AGDI as a positive example of how PUM can have greater impact, since it is not only a farm, but also provides training

⁴⁰ See footnote ³⁹.

opportunities for other farmers and showcases different products and techniques. The expert in fact advised both clients to get in touch with AGDI for training and to see what other products he could incorporate in the farm. The client believed that working with trainers like AGDI enables a spread of support that only single support missions do not allow—the knowledge provided by PUM would be likely to stay only in the individual farm.

Efficiency

The expert noted that being a volunteer organisation can create some inefficiency but didn't point to the RMF case in particular. The PUM expert believed that, working as volunteers, PUM staff members changed quite frequently. He had found this somewhat difficult, as country or sector coordinators changed and established new directions or guidelines. Similarly, for changes in PUM's board of directors. During the shift to the programmatic approach, in particular, some missions in some countries were left with an action plan that was not followed, and the country team was not always in line as to what the new way of working implied. The expert mentioned that, in general, volunteers are very eager to share experiences, but the disadvantage is that "almost everyone is a soloist" and that everybody "thinks he knows the best". The expert called for a greater mixture of young and older people who could learn from each other.

Relevance

There was some evidence that PUM's support seemed relevant for the direct beneficiary. According to the report documents of the PUM expert, the land of both client farms was in poor condition, some of the cattle was not surviving over the dry season. The content of PUM's support appear relevant to achieve improvements in this condition.

The expert mentioned that the support request is sometimes not clear enough, although this was only partially the case with RMF. According to the debriefing data, the application from the client simply requested to "assess the current practice on the two farms", expecting as results "better pasture, cattle feeding, and increased milk production". This doesn't fully match the content of the expert's advice, who responded that actual and requested needs matched reasonably but not fully. After speaking with the client, the agreed objectives were also focused on management and connecting with other clients. According to the expert, clients "often say that they need to make money, but the role of the expert is to convince them that that they need knowledge".

The expert believed that remote contact before going to the field would help to better design the support mission, making it more relevant. This would allow PUM staff, the expert and the client to align on what is really needed and what is most relevant in terms of maximising PUM's potential impact. One of the experts noted that it is still necessary to visit the client physically.

Coherence

No evidence could be obtained regarding the coherence of PUM's support with other local or international support sources for RMF.

Additionality

The expert mentioned other local Dutch organisations but could not confirm if they had supported RMF. He mentioned that Bles Dairies⁴¹ and others Dutch organisations (without names) were present. The clients could not be interviewed to confirm if other support sources (local or international) had been available to them.

The expert saw PUM's value in its independence and volunteer base. He believed PUM's only interest is to provide the local clients with knowledge, independently of any third-party interests. According to the expert, volunteers are not trying to sell anything to the farmers, so their incentives are fully aligned in the client's benefit. Other kinds of consultants—local or international—might want to gain something from them.

⁴¹ <https://www.bles-dairies.nl>